



CITY OF OCEANSIDE

WATER UTILITIES DEPARTMENT

February 16, 1996

Lauren Fondahl
Region 9 Sludge Coordinator
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105-3901

RE: 1995 Annual Sewage Sludge Report, 40 CFR Part 503

Dear Ms. Fondahl:

Enclosed please find the City of Oceanside's annual report for Sewage Sludge for 1995 as required under 40 CFR Part 503.

The City has two treatment plants. Both San Luis Rey and La Salina Wastewater Treatment Plants are Class I sludge treatment facilities. All dewatered sludges from both plants were hauled by Waste Management of North County, an Oceanside waste hauler, to one of three locations in California. One was Recyc, a composting facility near Corona, the second was Wheelabrator Clean Water Systems BioGro Division, a company that does agricultural land application in Riverside County, and BKK, a landfill that does co-disposal with municipal solid waste.

This report covers the treatment information and quantity of sewage sludge from both treatment plants. The pollutant levels, pathogen reduction, and vector attraction reduction data are enclosed.

Sludge from both sewer plants was tested and determined to be nonhazardous using the TCLP methodology. This information was required for co-disposal with municipal solid waste in landfills.

Please call Guss Pennell at (619) 966-8795 if you need additional information or if there are any questions concerning this report.

Sincerely,

Guss H. Pennell
Environmental Regulatory Compliance Officer

Enclosures

xc: San Diego Regional Water Quality Control Board
Zach Manikowski, Wheelabrator Clean Water Systems BioGro Division
Joe Oltman, Recyc Inc.

**CITY OF OCEANSIDE
SEWAGE SLUDGE ANNUAL REPORT - 1995**

GENERAL INFORMATION

Date: February 14, 1996

Name of Generator: City of Oceanside

Location: La Salina Wastewater Treatment Plant
1330 South Tait Street
Oceanside, California 92054

Mailing Address: City of Oceanside
Water Utilities Department
300 North Hill Street
Oceanside, California 92054-2885

Contact Person: Guss H. Pennell, Compliance Coordinator

Telephone: 619-966-8795

Flow MGD (average): 3.9 MGD (1995 average)

Plant Description: The La Salina Wastewater Treatment Plant is an activated sludge treatment facility that has a design capacity of 5.5 MGD. It is a Class I sludge management facility with an approved pretreatment program.

Sludge Treatment Process: Primary clarifier sludge is pumped directly into the primary anaerobic digester that is mechanically mixed and heated. Waste activated sludge is thickened in a dissolved air flotation unit and pumped into the primary digester as well. Digested sludge is then transferred into a gas mixed secondary anaerobic digester that is not heated. Each digester has a capacity of 630,000 gallons.

The treated sludge from the secondary anaerobic digester is injected with hydrogen peroxide for odor control prior to dewatering with two 2.2 meter filter belt presses. The dewatered sludge (17.0% Total Solids Annual Average) was loaded into 30 cubic yard end dump trailers and trucked to Recyc, a California permitted composting facility near Corona in Riverside County, California from January through March 1995. For the rest of 1995 all La Salina WWTP dewatered sludge was trucked to western Riverside County for direct land application to agricultural fields by Wheelabrator Clean Water Systems BioGro Division according to the EPA's protocol for Class B biosolids. The sludge was incorporated into the ground within 24 hours according to Riverside County Ordinance #696. All 1995 hauling was done under contract with Waste Management of North County.

**CITY OF OCEANSIDE
SEWAGE SLUDGE ANNUAL REPORT - 1995**

Location: La Salina Wastewater Treatment Plant - Continued:

Total Sludge Generated in 1995: 439 Dry Metric Tons

Sludge delivered to Recyc Composting Facility: 106 Dry Metric Tons

Address of Next Preparer: Recyc Inc.
114 Business Center Drive
Corona, California 91720-1724
909-371-3929

Sludge delivered to Wheelabrator BioGro: 333 Dry Metric Tons

Address of Land Application Facility: Wheelabrator Clean Water
Systems, BioGro Division
19600 Fairchild, Suite 120
Irvine, CA 92715
714-476-4080

**CITY OF OCEANSIDE
SEWAGE SLUDGE ANNUAL REPORT - 1995**

Location: La Salina Wastewater Treatment Plant - Continued:

Pollutant Concentrations (Metals): January to December 1995, analyzed monthly but reported as bimonthly averages on Notice of Necessary Information (NANI) certifications for March through December. See attached. Monthly metals data is attached for January through March from Recyc Inc. for the composted material.

The data below is taken from the monthly data sheets. Metals are expressed as Total and Units are mg/kg Dry Weight. All values are within Table 3 Limits.

§503.13 Pollutants	Table 3 Limits	Jan.	Feb.	March	April	May	June
Arsenic	41	16.5	17.4	15.6	19.1	N	3.7
Cadmium	39	4.7	4.5	4.4	3.2	O	3.3
Chromium	1200	37.4	42.6	44.4	88.3	T	43.7
Copper	1500	459	430	420	470		378
Lead	300	59.4	50.6	51.5	53.2	T	62.7
Mercury	17	2.2	2.2	2.5	2.6	E	0.9
Molybdenum	* 75	10.0	7.2	7.8	8.5	S	8.9
Nickel	420	162	178	161	302	T	98
Selenium	36	<6	<6	<6	<6	E	11.0
Zinc	2800	871	914	896	846	D	741
% T. S.	No Std.	17.4%	17.4%	17.9%	18.8%		15.8%
§503.13 Pollutants	Table 3 Limits	July	Aug.	Sept.	Oct.	Nov.	Dec.
Arsenic	41	4.3	4.1	<14	<13	<14	<14
Cadmium	39	3.7	4.4	4.2	4.7	5.6	4.1
Chromium	1200	43.5	47.7	38.6	28.6	25.8	21.5
Copper	1500	401	345	467	461	495	475
Lead	300	68.9	38.9	53.4	44.6	43.8	40.4
Mercury	17	0.9	1.4	2.1	2.1	2.3	2.5
Molybdenum	* 75	9.0	27.1	8.0	7.8	11.3	<7.4
Nickel	420	84.1	31.6	64.5	62.5	71.3	67.7
Selenium	36	13.1	14.1	21.4	8.0	<21	<19
Zinc	2800	793	750	1028	921	937	899
% T. S.	No Std.	16.4%	16.0%	16.3%	18.4%	16.2%	17.1%

* 75 - Molybdenum Limit from Table 1.

Laboratory data sheets are attached. They indicate analytical methods, units, and detection limits. The values on the Associated Laboratories analytical reports are given in mg/kg Wet Weight. The data was converted to Dry Weight for the above tables.

**CITY OF OCEANSIDE
SEWAGE SLUDGE ANNUAL REPORT - 1995**

Location: La Salina Wastewater Treatment Plant - Continued:

Pathogen Reduction: During January through March 1995 all sludge (106 Dry Tons) was hauled to Recyc Inc. for composting . See attached Recyc Inc. certificates indicating that the sludge met Class A pathogen requirements under 503.32 (a) for that period.

For the remainder of the year all sludge was hauled to Riverside County for land application by Wheelabrator BioGro. Class B requirements in 503.32 (b)(2) Alternative 1 were met by the La Salina WWTP for five bimonthly monitoring periods for March through December 1995. See attached Notice of Necessary Information (NANI) certificates.

Vector Attraction Reduction: The vector attraction reduction requirements under 503.33 (b)(5) were met by Recyc Inc. for the sludge hauled to that composting facility during January through March 1995. See Recyc Inc. certificates.

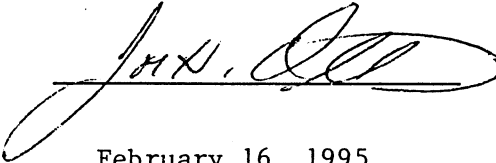
The requirements in 503.33 (b)(1) or Option 1 were met by La Salina WWTP for the five bimonthly monitoring periods for March through December 1995. See attached NANI certificates.



**40 CODE OF FEDERAL REGULATIONS PART 503
SEWAGE SLUDGE PREPARATION CERTIFICATE**

I certify, under penalty of law, that the Class A pathogen requirements in §503.32(a) and the vector attraction reduction requirement in §503.33(b)(5) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Attached are the results of product analysis for pathogens and pollutants accomplished for the month of January, 1995.

Signature 
Date February 16, 1995

Applied P & Ch Laboratory

13780 Magnolia Ave. Chino CA 91710

Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:

Recyc, Inc.

Attention: Joe Oltman

114 Business Center Dr.

Corona, CA 91720

Tel: (909)371-3929 Fax: (909)737-0956

Service ID #: 801-951307

Received : 02/01/95

Collected by:

Tested : 02/06-09/95

Collected on: 01/31/95

Reported : 02/13/95

Sample description:

Soil Compost

Project: Monthly Composite

Analysis of Soil

801-951307 Page 1 of 1

Component Analyzed	Method	Unit	PQL	Concentration
				Compost Sample(131-95) 95-1807-1
Total Coliform, MTF, 3X5 tubes	SM9221B/91	MPN/kg	2	<2
Fecal Coliform, MTF, 3X5 tubes	SM9221C	MPN/kg	2	<2
pH*	150.1/9040	pH unit	0.01	7.53
Moisture, percent in soil	ASTM-D2216	wt%	0.1	41.8
Arsenic, Total, by GFAA	206.2/7050	mg/kg	0.2	1.6
Cadmium, Cd, by ICP	200.7/6010	mg/kg	0.5	2.0
Chromium, Total, by ICP	200.7/6010	mg/kg	1	28
Copper, Cu, by ICP	200.7/6010	mg/kg	0.5	175
Lead, Total, by ICP	200.7/6010	mg/kg	3	30
Mercury, Hg	245.1/7470	mg/kg	0.2	1.2
Molybdenum, Mo, by ICP	200.7/6010	mg/kg	1	N.D.
Nickel, Ni, by ICP	200.7/6010	mg/kg	2	18
Selenium, Se, by GFAA	270.2/7740	mg/kg	0.2	5.5
Zinc, Zn, by ICP	200.7/6010	mg/kg	0.2	391

PQL : Practical Quantitation Limit

SM : Standard Methods for Examination of Water and Waste Water.

N.D. : Not Detected or less than the quantitation limit.

*Analyzed on a 1:1 water extract.

Respectfully submitted,



Dominic Lau

Laboratory Manager

Applied P & Ch Laboratory



**40 CODE OF FEDERAL REGULATIONS PART 503
SEWAGE SLUDGE PREPARATION CERTIFICATE**

I certify, under penalty of law, that the Class A pathogen requirements in §503.32(a) and the vector attraction reduction requirement in §503.33(b)(5) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Attached are the results of product analysis for pathogens and pollutants accomplished for the month of February 1995.

Signature

Date

March 15, 1995

Applied P & Ch Laboratory

13760 Magnolia Ave. Chino CA 91710

Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:

Recyc, Inc.

Attention: Joe Olman

114 Business Center Dr.

Corona, CA 91720

Tel: (909)371-3929 Fax: (909)737-0956

Service ID #: 801-951600

Received : 03/01/95

Collected by: SAB

Tested : 03/02-03/95

Collected on: 02/28/95

Reported : 03/10/95

Sample description:

Compost from 22500 Temescal Cyn

Project: Monthly Composite

Analysis of Soil

801-951600 Page 1 of 1

Component Analyzed	Method	Unit	PQL	Concentration
				Compost
				95-1600-1
Total Coliform, MTF, 3X5 tubes	SM9221B	MPN/g	2	<2
Fecal Coliform, MTF, 3X5 tubes	SM9221C	MPN/g	2	<2
pH*	150.1/9040	pH unit	0.01	8.65
Moisture, percent in soil	ASTM-D2974	wt%	0.1	39.7
Arsenic, Total, by GFAA	206.2/7060	mg/kg	0.2	1.4
Cadmium, Cd, by ICP	200.7/6010	mg/kg	0.01	2.4
Chromium, Total, by ICP	200.7/6010	mg/kg	5	28
Copper, Cu, by ICP	200.7/6010	mg/kg	0.5	179
Lead, Total, by ICP	200.7/6010	mg/kg	4	29
Mercury, Hg	245.1/7471	mg/kg	0.2	1.3
Molybdenum, Mo, by ICP	200.7/6010	mg/kg	5	N.D.
Nickel, Ni, by ICP	200.7/6010	mg/kg	2	19
Selenium, Se, by GFAA	270.2/7740	mg/kg	0.2	4.1
Zinc, Zn, by ICP	200.7/6010	mg/kg	0.3	409

PQL : Practical Quantitation Limit

SM : Standard Methods for Examination of Water and Waste Water.

N.D. : Not Detected or less than the quantitation limit.

* Analyzed on a 1:1 water extract.

Respectfully submitted,



Dominic Lau

Laboratory Manager

Applied P & Ch Laboratory



**40 CODE OF FEDERAL REGULATIONS PART 503
SEWAGE SLUDGE PREPARATION CERTIFICATE**

I certify, under penalty of law, that the Class A pathogen requirements in §503.32(a) and the vector attraction reduction requirement in §503.33(b)(5) have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Attached are the results of product analysis for pathogens and pollutants accomplished for the month of March 1995.

Signature

Date

April 5, 1995

Applied P & Ch Laboratory

13760 Magnolia Ave. Chino CA 91710

Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:

Recyc, Inc.

Attention: Joe Oltman

114 Business Center Dr.

Corona, CA 91720

Tel: (909)371-3929 Fax: (909)737-0956

Service ID #: 801-951715

Received : 03/10/95

Collected by:

Tested : 3/14-20/95

Collected on: 03/10/95

Reported : 03/20/95

Sample description:

Compost from 22500 Temescal Canyon

Analysis of Compost

801-951715 Page 1 of 1

Component Analyzed	Method	Unit	PQL	Concentration
				Joe March Compost 95-1715-1
Total Coliform, MTF, 3X5 tubes	SM9221B	MPN/g	2	<2
Fecal Coliform, MTF, 3X5 tubes	SM9221C	MPN/g	2	<2
pH*	150.1/9040	pH Unit	0.01	7.66
Moisture, percent in soil	ASTM-D2974	wt%	0.1	42.8
Arsenic, Total, by GFAA	200.6/7060	mg/kg	0.2	1.6
Cadmium, Cd	200.7/6010	mg/kg	0.5	2.9
Chromium, Total	200.7/6010	mg/kg	1	30
Copper, Cu	200.7/6010	mg/kg	0.5	173
Lead, Total	200.7/6010	mg/kg	3	24
Mercury, Hg	245.1/7471	mg/kg	0.2	1.2
Molybdenum, Mo, by AA	200.7/6010	mg/kg	1	N.D.
Nickel, Ni, by AA	200.7/6010	mg/kg	2	19
Selenium, Se, by GFAA	270.2/7740	mg/kg	0.2	3.3
Zinc, Zn, by AA	200.7/6010	mg/kg	0.2	398

PQL : Practical Quantitation Limit

SM : Standard Methods for Examination of Water and Waste Water.

N.D. : Not Detected or less than the quantitation limit.

* Analyzed on a 1:1 water extract.

Respectfully submitted,



Dominic Lau

Laboratory Manager

Applied P & Ch Laboratory



CITY OF OCEANSIDE

WATER UTILITIES DEPARTMENT LABORATORY

LABORATORY REPORT

SAMPLE: SLUDGE CAKE -- TOTAL SOLIDS = 17.4 %

IDENTIFICATION: LA SALINA WWTP
12 DISCRETE SAMPLES COMPOSITED IN LAB

SAMPLES RECEIVED: 19-JAN-95

ANALYSIS PERFORMED BY: CITY OF OCEANSIDE
WATER UTILITIES DEPARTMENT LABORATORY

DATE REPORTED: MAY 17, 1995

ANALYTE	METHOD	CONCENTRATION (mg/kg) DRY WT
ARSENIC	7060	16.5
CADMIUM	6010	4.73
CHROMIUM, TOTAL	6010	37.4
COPPER	6010	459
LEAD	6010	59.4
MERCURY	7471	2.24
MOLYBDENUM	6010	9.98
NICKEL	6010	162
SELENIUM	7740	<6
ZINC	6010	871

METHOD: EPA SW846, TEST METHODS FOR EVALUATING SOLID WASTES,
THIRD EDITION.

APPROVED BY: Mary Gonzales
MARY GONZALES, SENIOR CHEMIST



CITY OF OCEANSIDE

WATER UTILITIES DEPARTMENT LABORATORY

LABORATORY REPORT

SAMPLE: SLUDGE CAKE -- TOTAL SOLIDS = 17.4 %

IDENTIFICATION: LA SALINA WWTP
12 DISCRETE SAMPLES COMPOSITED IN LAB

SAMPLES RECEIVED: 13-FEB-95

ANALYSIS PERFORMED BY: CITY OF OCEANSIDE
WATER UTILITIES DEPARTMENT LABORATORY

DATE REPORTED: MAY 17, 1995

ANALYTE	METHOD	CONCENTRATION (mg/kg) DRY WT
ARSENIC	7060	17.4
CADMIUM	6010	4.52
CHROMIUM, TOTAL	6010	42.6
COPPER	6010	430
LEAD	6010	50.6
MERCURY	7471	2.24
MOLYBDENUM	6010	7.24
NICKEL	6010	178
SELENIUM	7740	<6
ZINC	6010	914

METHOD: EPA SW846, TEST METHODS FOR EVALUATING SOLID WASTES,
THIRD EDITION.

APPROVED BY:

Mary Gonzales
MARY GONZALES, SENIOR CHEMIST

CITY OF OCEANSIDE
TREATED SEWAGE SLUDGE MONITORING

TYPE OF MONITORING: BACTERIOLOGICAL
SAMPLING FREQUENCY: BIMONTHLY

DATE REPORTED: MARCH 13, 1995

REQUIREMENT FOR CLASS B ALTERNATIVE I: DENSITY OF FECAL COLIFORM FROM SEVEN SAMPLES OF TREATED SEWAGE SLUDGE MUST NOT EXCEED 2 MILLION PER GRAM OF SEWAGE SLUDGE SOLIDS.

SAMPLE LOCATION	SAMPLE	# FECAL COLIFORM PER 100 ML	% TS	# FECAL COLIFORM /GM TS	LOG	SAMPLER	DATE	TIME	DIG. #
LA SALINA	1	20000	17.6	1136	3.0555	MURPHY	02-JAN-95	0700-1500	SECONDARY
	2	125000	17.7	7062	3.8489	GONZALES	09-10 JAN-95	2200-0200	SECONDARY
PRESS CAKE	3	90000	15.5	5806	3.7639	AT	15-JAN-95	0900-1700	SECONDARY
	4	1600000	16.0	100000	5.0000	AT	22-JAN-95	0800-1200	SECONDARY
	5	500000	16.8	29762	4.4737	WYB	29-30-JAN-95	2100-0500	SECONDARY
	6	60000	18.2	3297	3.5181	FG/WM/AT	14-FEB-95	1400-2200	SECONDARY
	7	3000000	17.2	174419	5.2416	CS/WRM	21-22-FEB-95	2330-0330	SECONDARY

LOG MEAN =

4.1288

GEOMETRIC MEAN =

ANTILOG (4.1288) = 13452

MEETS CLASS B ALTERNATIVE I STANDARDS: YES

COMMENTS: NONE

METHOD: FECAL COLIFORM - DIRECT TEST BY MOST PROBABLE NUMBER (MPN), STND. MTHDS, 18TH ED., 9221 E.2
%T.S. - STND. MTHDS., 17TH ED., 2540 B.

REPORT BY: SARA DRAPER

APPROVED BY: *Mary Gonzalez*

XC: SAN LUIS REY WWTP, LA SALINA WWTP, WATER UTILITIES ADMIN/G. PENNELL

NOTICE AND NECESSARY INFORMATION (NANI)

This form is to assist compliance with the bulk sewage sludge (biosolids) notification requirements [503.12(f)]. Please note, however, that if the biosolids meet the exceptional quality criteria, then the notification requirements do not apply. This form can be used by preparers of biosolids to transmit information to land appliers and also by land appliers to transmit information to land owners or lease holders.

Facility and Biosolids Type: La Salina WWTP Dewatered Digested Sludge

Monitoring Period: From 03 / 01 / 95 To 04 / 30 / 95

To be Completed by PREPARERS of Biosolids

A. Please provide pollutant concentrations

Name	Concentration (mg/kg) Dry Weight	Pollutant Concentrations (Table 3, 40 CFR 503.13) (monthly average)	Ceiling Concentrations* (Table 1, 40 CFR 503.13) (daily maximum)
Arsenic	17 mg/kg	41 mg/kg	75 mg/kg
Cadmium	4 mg/kg	39 mg/kg	85 mg/kg
Chromium	66 mg/kg	1200 mg/kg	3000 mg/kg
Copper	445 mg/kg	1500 mg/kg	4300 mg/kg
Lead	52 mg/kg	300 mg/kg	840 mg/kg
Mercury	3 mg/kg	17 mg/kg	57 mg/kg
Molybdenum	8 mg/kg	N/A**	75 mg/kg
Nickel	232 mg/kg	420 mg/kg	420 mg/kg
Selenium	<6 mg/kg	36 mg/kg	100 mg/kg
Zinc	871 mg/kg	2800 mg/kg	7500 mg/kg
Nitrogen Concentration	Not Tested	N/A	N/A

* Biosolids may not be land applied if any pollutant exceeds these values.

** EPA has temporarily removed molybdenum limits from Table 3, Table 2 and Table 4.

B. Pathogen Reduction (40 CFR 503.32) -- Please indicate the level achieved

☐ Class A ☒ Class B – 40 CFR 503.32 (b)(2) Alternative 1.

C. Vector Attraction Reduction (40 CFR 503.33) -- Please indicate the option performed

☒ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4
☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8
☐ No vector attraction reduction options were performed

D. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or these persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name and Official Title (type or print) Guss Pennell, Compliance Manager	B. Area Code and Telephone Number 619-966-8795 & 619-966-4874 (FAX)
C. Signature 	D. Date Signed July 20, 1995



CITY OF OCEANSIDE

WATER UTILITIES DEPARTMENT LABORATORY

LABORATORY REPORT

SAMPLE: SLUDGE CAKE -- TOTAL SOLIDS = 17.9 %

IDENTIFICATION: LA SALINA WWTP
12 DISCRETE SAMPLES COMPOSITED IN LAB

SAMPLES RECEIVED: 01-MAR-95

ANALYSIS PERFORMED BY: CITY OF OCEANSIDE
WATER UTILITIES DEPARTMENT LABORATORY

DATE REPORTED: MAY 17, 1995

ANALYTE	METHOD	CONCENTRATION (mg/kg) DRY WT
ARSENIC	7060	15.6
CADMIUM	6010	4.41
CHROMIUM, TOTAL	6010	44.4
COPPER	6010	420
LEAD	6010	51.5
MERCURY	7471	2.51
MOLYBDENUM	6010	7.78
NICKEL	6010	161
SELENIUM	7740	<6
ZINC	6010	896

METHOD: EPA SW846, TEST METHODS FOR EVALUATING SOLID WASTES,
THIRD EDITION.

APPROVED BY:

Mary Gonzales
MARY GONZALES, SENIOR CHEMIST



CITY OF OCEANSIDE

WATER UTILITIES DEPARTMENT LABORATORY

LABORATORY REPORT

SAMPLE: SLUDGE CAKE -- TOTAL SOLIDS = 18.8 %

IDENTIFICATION: LA SALINA WWTP
12 DISCRETE SAMPLES COMPOSITED IN LAB

SAMPLES RECEIVED: 19-APR-95

ANALYSIS PERFORMED BY: CITY OF OCEANSIDE
WATER UTILITIES DEPARTMENT LABORATORY

DATE REPORTED: JUNE 8, 1995

ANALYTE	METHOD	CONCENTRATION (mg/kg) DRY WEIGHT	POLLUTANT CONCENTRATION (MONTHLY AVE)	CEILING CONCENTRATION (DAILY MAX)
ARSENIC	7060	19.1	41 mg/Kg	75 mg/Kg
CADMIUM	6010	3.16	39 mg/Kg	85 mg/Kg
CHROMIUM, TOTAL	6010	88.3	1200 mg/Kg	3000 mg/Kg
COPPER	6010	470	1500 mg/Kg	4300 mg/Kg
LEAD	6010	53.2	300 mg/Kg	840 mg/Kg
MERCURY	7471	2.55	17 mg/Kg	57 mg/Kg
MOLYBDENUM	6010	8.46		75 mg/Kg
NICKEL	6010	302	420 mg/Kg	420 mg/Kg
SELENIUM	7740	<6	36 mg/Kg	100 mg/Kg
ZINC	6010	846	2800 mg/Kg	7500 mg/Kg

METHOD: EPA SW846, TEST METHODS FOR EVALUATING SOLID WASTES,
THIRD EDITION.

APPROVED BY:

Mary Gonzales
MARY GONZALES, SENIOR CHEMIST

CITY OF OCEANSIDE
TREATED SEWAGE SLUDGE MONITORING

TYPE OF MONITORING: BACTERIOLOGICAL
SAMPLING FREQUENCY: BIMONTHLY

DATE REPORTED: MAY 02, 1995

REQUIREMENT FOR CLASS B ALTERNATIVE I: DENSITY OF FECAL COLIFORM FROM SEVEN SAMPLES OF TREATED SEWAGE SLUDGE MUST NOT EXCEED 2 MILLION PER GRAM OF SEWAGE SLUDGE SOLIDS.

SAMPLE LOCATION	SAMPLE	# FECAL COLIFORM PER 100 ML	% TS	# FECAL COLIFORM /GM TS	LOG	SAMPLER	DATE	TIME	DIG. #
LA SALINA	1	300000	18.1	16575	4.2194	BARTOLINI	02-MAR-95		SECONDARY
	2	110000	15.9	6918	3.8400	WRM	07-08 MAR-95	1400-2200	SECONDARY
PRESS CAKE	3	170000	18.6	9140	3.9609	CS & WYB	13-14-MAR-95	1900-2300	SECONDARY
	4	41965	18.4	2281	3.3581	WYB/FG/CS	04-05-APR-95	1900-0300	SECONDARY
	5	1600000	18.4	86957	4.9393	WYB/CS	09-APR-95	0900-1700	SECONDARY
	6	110000	17.8	6180	3.7910	WYB	17-APR-95	0900-1700	SECONDARY
	7	14000	16.8	833	2.9208	CS	25-26-APR-95	1900-0300	SECONDARY

LOG MEAN = 3.8614
GEOMETRIC MEAN = ANTILOG (3.8614) = 7267
MEETS CLASS B ALTERNATIVE I STANDARDS: YES

COMMENTS: NONE

METHOD: FECAL COLIFORM - DIRECT TEST BY MOST PROBABLE NUMBER (MPN), STND. MTHDS, 18TH ED., 9221 E.2
%T.S. - STND. MTHDS., 17TH ED., 2540 B.

REPORT BY: SARA DRAPER

APPROVED BY: *Mary Gonzalez*

XC: SAN LUIS REY WWTP, LA SALINA WWTP, WATER UTILITIES ADMIN/G. PENNELL

LA SALINA WASTEWATER TREATMENT PLANT - MARCH 1995

REQUIREMENTS FOR VECTOR ATTRACTION REDUCTION - 503.33(b)(1) - OPTION 1
REDUCTION IN VOLATILE SOLIDS CONTENT - AT LEAST 38% REDUCTION REQUIRED

MONTH	RAW	SLUDGE		DAF	SLUDGE	DIGESTER	PRESS	VOL. SOLIDS	
MARCH	%TS	%VS	FLOW	%TS	%VS	FLOW	FEED %VS	FEED %VS	REDUCTION %
1	3.21	78.8	12000				78.8		REDUCTIONS BASED ON MONTHLY AVERAGES, SEE BELOW.
2								63.9	
3	3.76	80.9	12000				80.9		
4									
5									
6	3.16	79.4	12000				79.4		
7									
8	3.58	77.9	12000				77.9		
9				3.23	81.6	28000	81.6		
10	4.04	78.1	12000				78.1		
11									
12									
13	5.26	77.2	12000				77.2		
14				1.76	80.7	28000	80.7	65.5	
15	1.58	72.8	12000				72.8		
16									
17	4.06	76.0	12000				76.0		
18									
19									
20	2.24	77.7	12000				77.7		
21									
22	3.83	77.8	12000				77.8		
23									
24	2.91	79.0	12000				79.0		
25									
26									
27	3.19	79.9	12000				79.9		
28				2.04	81.9	28000	81.9		
29	3.92	81.4	12000				81.4		
30								66.7	
31	2.66	80.0	12000				80.0		
AVG.	3.39	78.4	12000	2.34	81.4	28000	80.2	65.4	53.5

NOTE: RAW SLUDGE AND DAF SLUDGE FLOWS ARE ESTIMATES, METERS ARE ON ORDER.

LA SALINA WASTEWATER TREATMENT PLANT - APRIL 1995

REQUIREMENTS FOR VECTOR ATTRACTION REDUCTION - 503.33(b)(1) - OPTION 1
REDUCTION IN VOLATILE SOLIDS CONTENT - AT LEAST 38% REDUCTION REQUIRED

MONTH APRIL	RAW %TS	SLUDGE %VS	SLUDGE FLOW	DAF %TS	SLUDGE %VS	SLUDGE FLOW	DIGESTER FEED %VS	PRESS FEED %VS	VOL. SOLIDS REDUCTION %
1									REDUCTIONS
2									
3	1.45	67.3	12000				67.3		
4				1.82	81.4	28000	81.4		BASED ON
5	2.00	78.4	12000				78.4		MONTHLY
6								68.1	
7	2.14	79.7	12000				79.7		AVERAGES,
8									
9									SEE BELOW.
10	2.25	80.3	12000				80.3		
11				2.07	82.0	28000	82.0		
12	2.30	77.3	12000				77.3		
13				3.56	79.2	28000	79.2	69.4	
14	2.41	80.0	12000				80.0		
15									
16									
17	3.32	79.5	12000				79.5		
18				1.70	81.2	28000	81.2	63.2	
19	2.28	78.9	12000				78.9		
20				3.05	81.3	28000	81.3		
21	3.10	79.4	12000				79.4		
22									
23									
24	2.37	80.2	12000				80.2		
25				1.60	79.4	28000	79.4		
26	2.93	80.2	12000				80.2		
27								63.0	
28	2.46	80.0	12000				80.0		
29									
30									
31									
AVG.	2.42	78.4	12000	2.30	80.8	28000	80.0	65.9	51.7

AVERAGE % VOLATILE SOLIDS REDUCTION FOR MARCH AND APRIL 1995 = 52.6

NOTE: RAW SLUDGE AND DAF SLUDGE FLOWS ARE ESTIMATES, METERS ARE ON ORDER.

NOTICE AND NECESSARY INFORMATION (NANI)

FILE COPY

This form is to assist compliance with the bulk sewage sludge (biosolids) notification requirements [503.12(f)]. Please note, however, that if the biosolids meet the exceptional quality criteria, then the notification requirements do not apply. This form can be used by preparers of biosolids to transmit information to land appliers and also by land appliers to transmit information to land owners or lease holders.

Facility and Biosolids Type: La Salina WWTP Dewatered Digested Sludge

Monitoring Period: From 05/01 / 95 To 06 / 30 / 95

To be Completed by PREPARERS of Biosolids

A. Please provide pollutant concentrations

Name	Concentration (mg/kg) Dry Weight	Pollutant Concentrations (Table 3, 40 CFR 503.13) (monthly average)	Ceiling Concentrations* (Table 1, 40 CFR 503.13) (daily maximum)
Arsenic	4 mg/kg	41 mg/kg	75 mg/kg
Cadmium	3 mg/kg	39 mg/kg	85 mg/kg
Chromium	44 mg/kg	1200 mg/kg	3000 mg/kg
Copper	378 mg/kg	1500 mg/kg	4300 mg/kg
Lead	63 mg/kg	300 mg/kg	840 mg/kg
Mercury	0.9 mg/kg	17 mg/kg	57 mg/kg
Molybdenum	9 mg/kg	N/A**	75 mg/kg
Nickel	97 mg/kg	420 mg/kg	420 mg/kg
Selenium	11 mg/kg	36 mg/kg	100 mg/kg
Zinc	741 mg/kg	2800 mg/kg	7500 mg/kg
Nitrogen Concentration	Not Tested	N/A	N/A

* Biosolids may not be land applied if any pollutant exceeds these values.

** EPA has temporarily removed molybdenum limits from Table 3, Table 2 and Table 4.

B. Pathogen Reduction (40 CFR 503.32) -- Please indicate the level achieved


☐ Class A ☒ Class B - 40 CFR 503.32 (b) (2) Alternative 1.

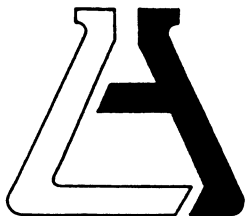
C. Vector Attraction Reduction (40 CFR 503.33) -- Please indicate the option performed

☒ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4
☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8
☐ No vector attraction reduction options were performed

D. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or these persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name and Official Title (type or print) Guss Pennell, Environmental Regulatory Compliance Officer	B. Area Code and Telephone Number 619-966-8795 & 619-966-4874 (FAX)
C. Signature 	D. Date Signed September 8, 1995



ASSOCIATED LABORATORIES

806 North Batavia - Orange, California 92668 - 714/771-6900

FAX 714/538-1209

CLIENT

City of Oceanside
Attn: Mary Gonzales
Water Utilities Department Lab
3950 North River Road
Oceanside, Ca 92054

LAB NO. : G93379-02
REPORTED 07/24/95

SAMPLE

Sludge

RECEIVED 07/13/95

IDENTIFICATION

LS Belt Press Cake
Date Collected 06/28/95
As Submitted

BASED ON SAMPLE

ANALYSES PER 40 CFR PART 503

<u>Constituent</u>	<u>Date/ Analyst</u>	<u>EPA Method</u>	<u>Results</u> Wet Weight
Arsenic	07/18 MT	6010	0.58 mg/kg
Cadmium	07/18 LB	6010	0.52 mg/kg
Chromium	07/18 LB	6010	6.91 mg/kg
Copper	07/18 LB	6010	59.8 mg/kg
Lead	07/18 MT	6010	9.9 mg/kg
Mercury	07/18 LB	6010	0.14 mg/kg
Molybdenum	07/18 LB	6010	1.41 mg/kg
Nickel	07/18 LB	6010	15.4 mg/kg
Selenium	07/18 MT	6010	1.74 mg/kg
Zinc	07/18 LB	6010	117 mg/kg

Total Solids - 15.8%

ASSOCIATED LABORATORIES, by:

Robert A. Webber
Vice President

RAW/gk

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

TESTING & CONSULTING

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TREATED SEWAGE SLUDGE MONITORING

TYPE OF MONITORING: BACTERIOLOGICAL
SAMPLING FREQUENCY: BIMONTHLY

DATE REPORTED: JULY 11, 1995

REQUIREMENT FOR CLASS B ALTERNATIVE I: DENSITY OF FECAL COLIFORM FROM SEVEN SAMPLES OF TREATED SEWAGE SLUDGE MUST NOT EXCEED 2 MILLION PER GRAM OF SEWAGE SLUDGE SOLIDS.

SAMPLE LOCATION	SAMPLE	# FECAL COLIFORM	% TS	# FECAL COLIFORM	LOG	SAMPLER	DATE	TIME	DIG. #
		PER 100 ML		/GM TS					
LA SALINA	1	30000	17.3	1734	3.2391	WYB	08-09-MAY-95	1900-0300	SECONDARY
	2	110000	17.0	6471	3.8109	CS	16-17-MAY-95	1700-0100	SECONDARY
PRESS CAKE	3	170000	18.6	9140	3.9609	WJB	21-22-MAY-95	1800-0100	SECONDARY
	4	300000	17.6	17045	4.2316	FG	04-JUNE-95	0900-1400	SECONDARY
	5	140000	17.4	8046	3.9056	WJB/JN	13-14-JUNE-95	1900-0300	SECONDARY
	6	140000	15.6	8974	3.9530	WYB/JN	19-20-JUNE-95	1700-0100	SECONDARY
	7	300000	15.8	18987	4.2785	WJB/CS/JN	27-JUNE-95	1800-0100	SECONDARY

LOG MEAN =

3.9114

GEOMETRIC MEAN =

ANTILOG (3.9114) = 8154

MEETS CLASS B ALTERNATIVE I STANDARDS: YES

COMMENTS: NONE

METHOD: FECAL COLIFORM - DIRECT TEST BY MOST PROBABLE NUMBER (MPN), STND. MTHDS, 18TH ED., 9221 E.2
XT.S. - STND. MTHDS., 17TH ED., 2540 B.

REPORT BY: SARA DRAPER

APPROVED BY:

Mary Gonzalez

XC: SAN LUIS REY WWTP, LA SALINA WWTP, WATER UTILITIES ADMIN/G. PENNELL

LA SALINA WASTEWATER TREATMENT PLANT - MAY 1995

REQUIREMENTS FOR VECTOR ATTRACTION REDUCTION - 503.33(b)(1) - OPTION 1
REDUCTION IN VOLATILE SOLIDS CONTENT - AT LEAST 38% REDUCTION REQUIRED

MONTH MAY	RAW %TS	SLUDGE %VS	FLOW	DAF %TS	SLUDGE %VS	FLOW	DIGESTER FEED %VS	PRESS FEED %VS	VOL. SOLIDS REDUCTION %
1	2.89	81.3	12000				81.3		REDUCTIONS BASED ON MONTHLY AVERAGES, SEE BELOW.
2								66.9	
3	2.14	79.0	12000				79.0		
4									
5	2.93	79.1	12000				79.1		
6									
7									
8	3.50	80.0	12000				80.0		
9								67.7	
10	2.81	80.4	12000				80.4		
11				3.22	81.7	28000	81.7	68.0	
12	2.36	80.3	12000				80.3		
13									
14									
15	2.22	82.0	12000				82.0		
16									
17	3.36	82.4	12000				82.4		
18				3.08	82.3	28000	82.3	65.7	
19	2.79	80.3	12000				80.3		
20									
21									
22	3.86	81.3	12000				81.3		
23								69.8	
24	2.99	81.9	12000				81.9		
25				3.24	80.9	28000	80.9		
26	3.58	80.8	12000				80.8		
27									
28									
29									
30								67.8	
31	3.87	80.3	12000				80.3		
AVG.	3.02	80.7	12000	3.18	81.6	28000	81.4	67.7	52.1

NOTE: RAW SLUDGE AND DAF SLUDGE FLOWS ARE ESTIMATES, METERS ARE ON ORDER.

LA SALINA WASTEWATER TREATMENT PLANT - JUNE 1995

REQUIREMENTS FOR VECTOR ATTRACTION REDUCTION - 503.33(b)(1) - OPTION 1
REDUCTION IN VOLATILE SOLIDS CONTENT - AT LEAST 38% REDUCTION REQUIRED

MONTH		RAW	SLUDGE		DAF	SLUDGE	DIGESTER	PRESS	VOL. SOLIDS
JUNE	%TS	%VS	FLOW	%TS	%VS	FLOW	FEED %VS	FEED %VS	REDUCTION %
1				3.58	81.2	28000	81.2		REDUCTIONS BASED ON MONTHLY AVERAGES, SEE BELOW.
2	2.77	66.7	12000				66.7		
3									
4									
5	4.21	81.0	12000				81.0		
6									
7	3.92	81.1	12000				81.1		
8									
9	3.96	81.3	12000				81.3		
10									
11									
12	3.22	78.3	12000				78.3		
13									
14	2.43	79.4	12000				79.4		
15									
16	0.69	71.0	12000				71.0		
17									
18									
19	4.71	80.0	12000				80.0		
20				1.88	80.8	28000	80.8	69.4	
21	0.52	53.8	12000				53.8		
22									
23	3.70	86.0	12000				86.0		
24									
25									
26	3.13	80.2	12000				80.2		
27									
28	2.61	79.3	12000				79.3		
29									
30									
<hr/>									
AVG.	2.99	76.5	12000	2.73	81.0	28000	79.6	69.4	41.8

AVERAGE % VOLATILE SOLIDS REDUCTION FOR MAY AND JUNE 1995 = 47.0

NOTE: RAW SLUDGE AND DAF SLUDGE FLOWS ARE ESTIMATES, METERS ARE ON ORDER.

NOTICE AND NECESSARY INFORMATION (NANI)

This form is to assist compliance with the bulk sewage sludge (biosolids) notification requirements [503.12(f)]. Please note, however, that if the biosolids meet the exceptional quality criteria, then the notification requirements do not apply. This form can be used by preparers of biosolids to transmit information to land appliers and also by land appliers to transmit information to land owners or lease holders.

Facility and Biosolids Type: La Salina WWTP Dewatered Digested Sludge

Monitoring Period: From 07 / 01 / 95 To 08 / 31 / 95

To be Completed by PREPARERS of Biosolids

A. Please provide pollutant concentrations

Name	Concentration (mg/kg) Dry Weight	Pollutant Concentrations (Table 3, 40 CFR 503.13) (monthly average)	Ceiling Concentrations* (Table 1, 40 CFR 503.13) (daily maximum)
Arsenic	4.2 mg/kg	41 mg/kg	75 mg/kg
Cadmium	4.0 mg/kg	39 mg/kg	85 mg/kg
Chromium	46 mg/kg	1200 mg/kg	3000 mg/kg
Copper	373 mg/kg	1500 mg/kg	4300 mg/kg
Lead	54 mg/kg	300 mg/kg	840 mg/kg
Mercury	1.1 mg/kg	17 mg/kg	57 mg/kg
Molybdenum	18 mg/kg	N/A**	75 mg/kg
Nickel	58 mg/kg	420 mg/kg	420 mg/kg
Selenium	14 mg/kg	36 mg/kg	100 mg/kg
Zinc	772 mg/kg	2800 mg/kg	7500 mg/kg
Nitrogen Concentration	Not Tested	N/A	N/A

* Biosolids may not be land applied if any pollutant exceeds these values.

** EPA has temporarily removed molybdenum limits from Table 3, Table 2 and Table 4.

B. Pathogen Reduction (40 CFR 503.32) -- Please indicate the level achieved

☐ Class A ☒ Class B - 40 CFR 503.32 (b) (2) Alternative 1.

C. Vector Attraction Reduction (40 CFR 503.33) -- Please indicate the option performed

☒ Option I ☐ Option 2 ☐ Option 3 ☐ Option 4
☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8

☐ No vector attraction reduction options were performed

D. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or these persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name and Official Title (<i>type or print</i>) Guss Pennell, Environmental Regulatory Compliance Officer	B. Area Code and Telephone Number 619-966-8795 & 619-966-4874 (FAX)
C. Signature	D. Date Signed February 8, 1996



ASSOCIATED LABORATORIES

806 North Batavia - Orange, California 92668 - 714/771-6900

FAX 714/538-1209

CLIENT

City of Oceanside
Attn: Mary Gonzales
Water Utilities Department Lab
3950 North River Road
Oceanside, Ca 92054

LAB NO. : G93379-04

REPORTED 07/24/95

SAMPLE

Sludge

RECEIVED 07/13/95

IDENTIFICATION

LS Belt Press Cake
Date Collected 07/13/95
As Submitted

BASED ON SAMPLE

ANALYSES PER 40 CFR PART 503

<u>Constituent</u>	<u>Date/ Analyst</u>	<u>EPA Method</u>	<u>Results Wet Weight</u>
Arsenic	07/18 MT	6010	0.70 mg/kg
Cadmium	07/18 LB	6010	0.61 mg/kg
Chromium	07/18 LB	6010	7.13 mg/kg
Copper	07/18 LB	6010	65.7 mg/kg
Lead	07/18 MT	6010	11.3 mg/kg
Mercury	07/18 LB	6010	0.14 mg/kg
Molybdenum	07/18 LB	6010	1.48 mg/kg
Nickel	07/18 LB	6010	13.8 mg/kg
Selenium	07/18 MT	6010	2.15 mg/kg
Zinc	07/18 LB	6010	130 mg/kg

Total Solids - 16.4%

ASSOCIATED LABORATORIES, by:

Robert A. Webber
Vice President

RAW/gk

NOTE: Unless notified in writing, all samples will be discarded
by appropriate disposal protocol 30 days from date reported.

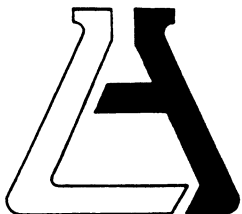
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ASSOCIATED LABORATORIES

806 North Batavia - Orange, California 92668 - 714/771-6900

FAX 714/538-1209

CLIENT

City of Oceanside (3869)
Attn: Mary Gonzales
Water Utilities Department Lab
3950 North River Road
Oceanside, CA 92054

LAB NO. G95213-02

REPORTED 09/01/95

SAMPLE

Soil

RECEIVED 08/17/95

IDENTIFICATION

LS Sludge Cake
Date Collected 08/16/95
As Submitted

BASED ON SAMPLE

ANALYSIS PER 40 CFR PART 503

<u>Constituent</u>	<u>Date/ Analyst</u>	<u>EPA Method</u>	<u>Results</u>	<u>Wet Weight</u>
Arsenic	08/18 LB	6010	0.65	mg/kg
Cadmium	08/18 LB	6010	0.71	mg/kg
Chromium	08/18 LB	6010	7.63	mg/kg
Copper	08/18 LB	6010	55.2	mg/kg
Lead	08/18 LB	6010	6.22	mg/kg
Mercury	08/22 NK	6010	0.22	mg/kg
Molybdenum	08/18 LB	6010	4.34	mg/kg
Nickel	08/18 LB	6010	5.06	mg/kg
Selenium	08/18 LB	6010	2.26	mg/kg
Zinc	08/18 LB	6010	120	mg/kg

Total Solids - 16.0%

ASSOCIATED LABORATORIES, by:

Robert A. Webber
Vice President

RAW/mjr

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

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TREATED SEWAGE SLUDGE MONITORING

TYPE OF MONITORING: BACTERIOLOGICAL
SAMPLING FREQUENCY: BIMONTHLY

DATE REPORTED: JULY 11, 1995

REQUIREMENT FOR CLASS B ALTERNATIVE I: DENSITY OF FECAL COLIFORM FROM SEVEN SAMPLES OF TREATED SEWAGE SLUDGE MUST NOT EXCEED 2 MILLION PER GRAM OF SEWAGE SLUDGE SOLIDS.

SAMPLE LOCATION	SAMPLE	# FECAL COLIFORM PER 100 ML	% TS	# FECAL COLIFORM /GM TS	LOG	SAMPLER	DATE	TIME	DIG. #
LA SALINA	1	50000	16.4	3049	3.4841	CS	12-13-JUL-95	1700-0100	SECONDARY
	2	80000	16.6	4819	3.6830	NASTASI	16-JUL-95	1600-2400	SECONDARY
PRESS CAKE	3	170000	16.0	10625	4.0263	WB	26-JUL-95	1400-2200	SECONDARY
	4	NO SAMPLE - PRESS NOT IN OPERATION							
	5	13000	16.1	807	2.9071	CS	16-AUG-95	1700-0400	SECONDARY
	6	13000	16.9	769	2.8861	CS	24-AUG-95	1700-0400	SECONDARY
	7	50000	16.1	3106	3.4921	FG	28-AUG-95	0000-0500	SECONDARY

LOG MEAN = 3.4131
GEOMETRIC MEAN = ANTILOG 3.4131 = 2589
MEETS CLASS B ALTERNATIVE I STANDARDS: YES

COMMENTS: NONE

METHOD: FECAL COLIFORM - DIRECT TEST BY MOST PROBABLE NUMBER (MPN), STND. MTHDS, 18TH ED., 9221 E.2
%T.S. - STND. MTHDS., 17TH ED., 2540 B.

REPORT BY: M.L. PAPPAGIANIS

APPROVED BY

Mary Gonzalez

XC: SAN LUIS REY WTP, LA SALINA WTP, WATER UTILITIES ADMIN/G. PENNELL

LA SALINA WASTEWATER TREATMENT PLANT - JULY 1995

REQUIREMENTS FOR VECTOR ATTRACTION REDUCTION - 503.33(b)(1) - OPTION 1
REDUCTION IN VOLATILE SOLIDS CONTENT - AT LEAST 38% REDUCTION REQUIRED

MONTH	RAW %TS	SLUDGE %VS	SLUDGE FLOW	DAF %TS	SLUDGE %VS	SLUDGE FLOW	DIGESTER FEED %VS	PRESS FEED %VS	VOL. SOLIDS REDUCTION %
1									REDUCTIONS
2									
3	4.66	78.9	15000				78.9		BASED ON
4									
5	3.55	78.6	15000				78.6		MONTHLY
6									
7	3.44	78.8	15000				78.8		AVERAGES,
8									
9									SEE BELOW.
10	3.52	78.4	15000				78.4		
11									
12	4.45	78.9	15000				78.9		
13								63.2	
14									
15									
16									
17	4.02	82.1	15000	1.94	80.4	20000	81.4	63.2	
18								59.6	
19	4.08	80.1	15000	3.76	81.4	20000	80.8	63.3	
20	3.36	78.9	15000	1.99	83.4	20000	80.9	72.9	
21									
22									
23									
24	3.44	78.6	15000	2.82	82.9	20000	80.8	46.2	
25	1.43	80.4	15000	3.22	82.2	20000	81.8	69.6	
26									
27	3.96	79.7	15000	1.96	78.5	20000	79.2	70.2	
28									
29									
30									
31	3.66	76.7	15000	3.21	88.2	20000	82.9	61.9	
AVG.	3.63	79.2	15000	2.70	82.4	20000	80.8	63.3	57.1

NOTE: RAW SLUDGE AND DAF SLUDGE FLOWS ARE ESTIMATES.

LA SALINA WASTEWATER TREATMENT PLANT - AUGUST 1995

REQUIREMENTS FOR VECTOR ATTRACTION REDUCTION - 503.33(b)(1) - OPTION 1
REDUCTION IN VOLATILE SOLIDS CONTENT - AT LEAST 38% REDUCTION REQUIRED

MONTH	RAW SLUDGE			DAF SLUDGE			DIGESTER		PRESS		VOL. SOLIDS REDUCTION %
	%TS	%VS	FLOW	%TS	%VS	FLOW	FEED %VS	FEED %VS	FEED %VS	FEED %VS	
1											REDUCTIONS BASED ON MONTHLY AVERAGES, SEE BELOW.
2											
3	2.67	77.9	15000	3.59	77.4	20000	77.6	65.8			
4											
5											
6											
7	5.53	79.6	15000	3.63	82.9	20000	81.1	74.2			
8	4.34	76.7	15000				76.7	68.3			
9	1.21	77.8	15000	3.34	81.3	20000	80.6				
10	3.60	78.6	15000	3.34	80.2	20000	79.5	64.3			
11											
12											
13											
14	3.84	77.9	15000	3.64	80.7	20000	79.5	75.0			
15	3.57	80.0	15000	3.46	80.2	20000	80.1	66.7			
16											
17	2.90	78.2	15000	2.13	82.4	20000	80.3	72.7			
18											
19											
20											
21	3.58	81.0	15000	2.41	81.0	20000	81.0	68.8			
22	3.67	78.9	15000				78.9	63.2			
23											
24	3.10	79.0	15000	3.26	82.9	20000	81.3				
25											
26											
27											
28	3.46	80.3	15000	4.80	80.8	20000	80.6	69.6			
29	2.67	77.8	15000				77.8	66.7			
30											
31	3.47	82.4	15000	2.22	82.9	20000	82.6	63.7			
AVG.	3.40	79.0	15000	3.26	81.2	20000	80.2	68.3			45.7

AVERAGE % VOLATILE SOLIDS REDUCTIONS FOR JULY AND AUGUST 1995 = 51.4

NOTE: RAW SLUDGE AND DAF SLUDGE FLOWS ARE ESTIMATES.

NOTICE AND NECESSARY INFORMATION (NANI)

This form is to assist compliance with the bulk sewage sludge (biosolids) notification requirements [503.12(f)]. Please note, however, that if the biosolids meet the exceptional quality criteria, then the notification requirements do not apply. This form can be used by preparers of biosolids to transmit information to land appliers and also by land appliers to transmit information to land owners or lease holders.

Facility and Biosolids Type: La Salina WWTP Dewatered Digested Sludge

Monitoring Period: From 09 / 01 / 95 To 10 / 31 / 95

To be Completed by PREPARERS of Biosolids

A. Please provide pollutant concentrations

Name	Concentration (mg/kg) Dry Weight	Pollutant Concentrations (Table 3, 40 CFR 503.13) (monthly average)	Ceiling Concentrations* (Table 1, 40 CFR 503.13) (daily maximum)
Arsenic	< 14 mg/kg	41 mg/kg	75 mg/kg
Cadmium	4.4 mg/kg	39 mg/kg	85 mg/kg
Chromium	34 mg/kg	1200 mg/kg	3000 mg/kg
Copper	464 mg/kg	1500 mg/kg	4300 mg/kg
Lead	49 mg/kg	300 mg/kg	840 mg/kg
Mercury	2.1 mg/kg	17 mg/kg	57 mg/kg
Molybdenum	7.9 mg/kg	N/A**	75 mg/kg
Nickel	64 mg/kg	420 mg/kg	420 mg/kg
Selenium	15 mg/kg	36 mg/kg	100 mg/kg
Zinc	974 mg/kg	2800 mg/kg	7500 mg/kg
Nitrogen Concentration	Not Tested	N/A	N/A

* Biosolids may not be land applied if any pollutant exceeds these values.

** EPA has temporarily removed molybdenum limits from Table 3, Table 2 and Table 4.

B. Pathogen Reduction (40 CFR 503.32) -- Please indicate the level achieved

☐ Class A ☒ Class B - **40 CFR 503.32 (b) (2) Alternative 1.**

C. Vector Attraction Reduction (40 CFR 503.33) -- Please indicate the option performed

☒ Option I ☐ Option 2 ☐ Option 3 ☐ Option 4

☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8

☐ No vector attraction reduction options were performed

D. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or these persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<p>A. Name and Official Title (type or print) Guss Pennell, Environmental Regulatory Compliance Officer</p>	<p>B. Area Code and Telephone Number 619-966-8795 & 619-966-4874 (FAX)</p>
<p>C. Signature <i>Guss Pennell</i></p>	<p>D. Date Signed February 8, 1996</p>



CITY OF OCEANSIDE

WATER UTILITIES DEPARTMENT LABORATORY

LABORATORY REPORT

SAMPLE: SLUDGE CAKE -- TOTAL SOLIDS = 16.3 %

IDENTIFICATION: LA SALINA WWTP
12 DISCRETE SAMPLES COMPOSITED IN LAB

SAMPLES RECEIVED: 05-SEP-95

ANALYSIS PERFORMED BY: CITY OF OCEANSIDE
WATER UTILITIES DEPARTMENT LABORATORY

DATE REPORTED: NOVEMBER 3, 1995

ANALYTE	METHOD	CONCENTRATION (mg/kg) DRY WEIGHT	POLLUTANT CONCENTRATION (MONTHLY AVE)	CEILING CONCENTRATION (DAILY MAX)
ARSENIC	7060	ND <14	41 mg/Kg	75 mg/Kg
CADMIUM	6010	4.19	39 mg/Kg	85 mg/Kg
CHROMIUM, TOTAL	6010	38.6	1200 mg/Kg	3000 mg/Kg
COPPER	6010	467	1500 mg/Kg	4300 mg/Kg
LEAD	6010	53.4	300 mg/Kg	840 mg/Kg
MERCURY	7471	2.1	17 mg/Kg	57 mg/Kg
MOLYBDENUM	6010	8		75 mg/Kg
NICKEL	6010	64.5	420 mg/Kg	420 mg/Kg
SELENIUM	7740	21.4	36 mg/Kg	100 mg/Kg
ZINC	6010	1028	2800 mg/Kg	7500 mg/Kg

METHOD: EPA SW846, TEST METHODS FOR EVALUATING SOLID WASTES,
THIRD EDITION.

APPROVED BY: Mary Gonzales
MARY GONZALES SENIOR CHEMIST



CITY OF OCEANSIDE

WATER UTILITIES DEPARTMENT LABORATORY

LABORATORY REPORT

SAMPLE: SLUDGE CAKE -- TOTAL SOLIDS = 18.4 %

IDENTIFICATION: LA SALINA WWTP
12 DISCRETE SAMPLES COMPOSITED IN LAB

SAMPLES RECEIVED: 19-OCT-95

ANALYSIS PERFORMED BY: CITY OF OCEANSIDE
WATER UTILITIES DEPARTMENT LABORATORY

DATE REPORTED: DECEMBER 28, 1995

ANALYTE	METHOD	CONCENTRATION (mg/kg) DRY WEIGHT	POLLUTANT CONCENTRATION (MONTHLY AVE)	CEILING CONCENTRATION (DAILY MAX)
ARSENIC	7060	ND <13	41 mg/Kg	75 mg/Kg
CADMIUM	6010	4.66	39 mg/Kg	85 mg/Kg
CHROMIUM, TOTAL	6010	28.6	1200 mg/Kg	3000 mg/Kg
COPPER	6010	461	1500 mg/Kg	4300 mg/Kg
LEAD	6010	44.6	300 mg/Kg	840 mg/Kg
MERCURY	7471	2.09	17 mg/Kg	57 mg/Kg
MOLYBDENUM	6010	7.83		75 mg/Kg
NICKEL	6010	62.5	420 mg/Kg	420 mg/Kg
SELENIUM	7740	8	36 mg/Kg	100 mg/Kg
ZINC	6010	921	2800 mg/Kg	7500 mg/Kg

METHOD: EPA SW846, TEST METHODS FOR EVALUATING SOLID WASTES,
THIRD EDITION.

APPROVED BY:


MARY GONZALES, LABORATORY SUPERVISOR

TREATED SEWAGE SLUDGE MONITORING

TYPE OF MONITORING: BACTERIOLOGICAL
SAMPLING FREQUENCY: BIMONTHLY

DATE REPORTED: December 28, 1995

REQUIREMENT FOR CLASS B ALTERNATIVE 1: DENSITY OF FECAL COLIFORM FROM SEVEN SAMPLES OF TREATED SEWAGE SLUDGE MUST NOT EXCEED 2 MILLION PER GRAM OF SEWAGE SLUDGE SOLIDS.

SAMPLE LOCATION	SAMPLE	# FECAL COLIFORM	% TS	# FECAL COLIFORM	LOG	SAMPLER	DATE	TIME	DIG. #
		PER 100 ML		/GM TS					
LA SALINA	1	17000	18.1	939	2.9728	SOTO	4-5-SEP-95	2200-0600	SECONDARY
	2	22000	17.2	1279	3.1069	FG	10-11-SEP-95	1900-0300	SECONDARY
PRESS CAKE	3	2300	15.7	146	2.1658	SOTO	18-SEP-95	0100-0430	SECONDARY
	4	30000	15.9	1887	3.2757	LAWRENCE	25-26-SEP-95	2330-0330	SECONDARY
	5	1300	16.4	79	1.8991	JN	04-OCT-95	2000-2400	SECONDARY
	6	3000	17.8	169	2.2267	SWOBODA	08-09-OCT-95	2030-0030	SECONDARY
	7	1400	16.0	88	1.9420	SWOBODA	15-16-OCT-95	2130-0130	SECONDARY
	8	5000	16.5	303	2.4815	CARUTHERS	22-23-OCT-95	2000-0400	SECONDARY

LOG MEAN = 2.5088
GEOMETRIC MEAN = ANTILOG 2.5088 = 322.7
MEETS CLASS B ALTERNATIVE 1 STANDARDS: YES

COMMENTS: NONE

METHOD: FECAL COLIFORM - DIRECT TEST BY MOST PROBABLE NUMBER (MPN), STND. MTHDS, 18TH ED., 9221 E.2
%T.S. - STND. MTHDS., 17TH ED., 2540 B.

REPORT BY: M.L. PAPPAGIANIS

APPROVED BY *M. Gonzalez*

XC: SAN LUIS REY WWTP, LA SALINA WWTP, WATER UTILITIES ADMIN/G. PENNELL

LA SALINA WASTEWATER TREATMENT PLANT - SEPTEMBER 1995

REQUIREMENTS FOR VECTOR ATTRACTION REDUCTION - 503.33(b)(1) - OPTION 1
REDUCTION IN VOLATILE SOLIDS CONTENT - AT LEAST 38% REDUCTION REQUIRED

MONTH	RAW %TS	SLUDGE %VS	SLUDGE FLOW	DAF %TS	SLUDGE %VS	SLUDGE FLOW	DIGESTER FEED %VS	PRESS FEED %VS	VOL. SOLIDS REDUCTION %
1									REDUCTIONS
2									
3									BASED ON
4									
5	3.49	77.2	20000	3.08	85.9	15000	80.7	69.2	MONTHLY
6									
7	4.20	76.6	20000	1.73	82.4	15000	78.0	60.0	AVERAGES,
8									
9									SEE BELOW.
10									
11	3.22	77.8	20000	2.03	80.9	23300	79.1	55.6	
12	3.42	76.7	20000	3.83	81.1	17900	78.9	75.0	
13									
14	3.96	78.9	20000	1.75	83.0	13700	79.9	66.7	
15									
16									
17									
18								69.4	
19	3.11	78.8	20000	4.25	81.6	12400	80.1	73.7	
20									
21	2.89	79.2	20000	1.67	87.8	8000	80.8	60.0	
22									
23									
24									
25	3.49	77.2	20000			15900	77.2	68.1	
26	3.64	81.3	20000	2.12	87.8	12600	83.0	78.3	
27									
28	3.70	80.4	20000	1.60	81.4	14800	80.6	50.0	
29									
30									
AVG.	3.51	78.4	20000	2.45	83.5	14860	80.2	66.0	51.0

NOTE: RAW SLUDGE FLOWS ARE ESTIMATES.

LA SALINA WASTEWATER TREATMENT PLANT - OCTOBER 1995

REQUIREMENTS FOR VECTOR ATTRACTION REDUCTION - 503.33(b)(1) - OPTION 1
REDUCTION IN VOLATILE SOLIDS CONTENT - AT LEAST 38% REDUCTION REQUIRED

MONTH	RAW %TS	SLUDGE %VS	SLUDGE FLOW	DAF %TS	SLUDGE %VS	SLUDGE FLOW	DIGESTER FEED %VS	PRESS FEED %VS	VOL. SOLIDS REDUCTION %
1									REDUCTIONS
2	4.30	77.0	20000	3.66	84.0	28000	80.8	80.0	
3	4.30	78.7	20000	2.60	81.9	10300	79.5	60.0	BASED ON
4									
5	4.20	79.6	20000	2.40	81.4	19800	80.3	70.4	MONTHLY
6									
7									AVERAGES,
8									
9	3.09	75.5	20000	4.30	82.7	7000	77.9	71.4	SEE BELOW.
10	3.43	76.4	20000	3.41	82.5	14800	79.0	63.6	
11									
12	3.72	76.2	20000	2.43	81.4	17300	78.1	71.0	
13									
14									
15									
16				3.98	82.4	9500	82.4	68.6	
17	3.77	79.0	20000	4.36	81.7	8500	79.9	69.0	
18									
19	2.79	75.5	20000	3.49	83.0	21100	79.8	62.9	
20									
21									
22									
23	3.20	79.2	20000	2.20	83.1	7000	80.0	73.7	
24	3.00	78.7	20000	2.60	81.3	10500	79.5	68.9	
25									
26	3.50	81.0	20000	2.40	82.0	19100	81.4	71.0	
27									
28									
29									
30	2.10	76.9	20000	1.90	82.2	14300	79.0	69.2	
31									
AVG.	3.45	77.8	20000	3.06	82.3	14400	79.5	69.2	43.1

AVERAGE % VOLATILE SOLIDS REDUCTIONS FOR SEPT. AND OCT. 1995 = 47.0

NOTE: RAW SLUDGE FLOWS ARE ESTIMATES.

NOTICE AND NECESSARY INFORMATION (NANI)

This form is to assist compliance with the bulk sewage sludge (biosolids) notification requirements [503.12(f)]. Please note, however, that if the biosolids meet the exceptional quality criteria, then the notification requirements do not apply. This form can be used by preparers of biosolids to transmit information to land appliers and also by land appliers to transmit information to land owners or lease holders.

Facility and Biosolids Type: La Salina WWTP Dewatered Digested Sludge

Monitoring Period: From 11 / 01 / 95 To 12 / 31 / 95

To be Completed by PREPARERS of Biosolids

A. Please provide pollutant concentrations

Name	Concentration (mg/kg) Dry Weight	Pollutant Concentrations (Table 3, 40 CFR 503.13) (monthly average)	Ceiling Concentrations* (Table 1, 40 CFR 503.13) (daily maximum)
Arsenic	< 14 mg/kg	41 mg/kg	75 mg/kg
Cadmium	4.8 mg/kg	39 mg/kg	85 mg/kg
Chromium	24 mg/kg	1200 mg/kg	3000 mg/kg
Copper	485 mg/kg	1500 mg/kg	4300 mg/kg
Lead	42 mg/kg	300 mg/kg	840 mg/kg
Mercury	2.4 mg/kg	17 mg/kg	57 mg/kg
Molybdenum	9.4 mg/kg	N/A**	75 mg/kg
Nickel	70 mg/kg	420 mg/kg	420 mg/kg
Selenium	< 20 mg/kg	36 mg/kg	100 mg/kg
Zinc	918 mg/kg	2800 mg/kg	7500 mg/kg
Nitrogen Concentration	Not Tested	N/A	N/A

* Biosolids may not be land applied if any pollutant exceeds these values.

** EPA has temporarily removed molybdenum limits from Table 3, Table 2 and Table 4.

B. Pathogen Reduction (40 CFR 503.32) -- Please indicate the level achieved

☐ Class A ☒ Class B - **40 CFR 503.32 (b) (2) Alternative 1.**

C. Vector Attraction Reduction (40 CFR 503.33) -- Please indicate the option performed

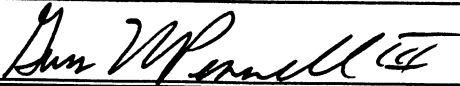
☒ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4

☐ Option 5 ☐ Option 6 ☐ Option 7 ☐ Option 8

☐ No vector attraction reduction options were performed

D. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or these persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<p>A. Name and Official Title (type or print) Guss Pennell, Environmental Regulatory Compliance Officer</p>	<p>B. Area Code and Telephone Number 619-966-8795 & 619-966-4874 (FAX)</p>
<p>C. Signature </p>	<p>D. Date Signed February 8, 1996</p>



CITY OF OCEANSIDE

WATER UTILITIES DEPARTMENT LABORATORY

LABORATORY REPORT

SAMPLE: SLUDGE CAKE -- TOTAL SOLIDS = 16.2 %

IDENTIFICATION: LA SALINA WWTP
12 DISCRETE SAMPLES COMPOSITED IN LAB

SAMPLES RECEIVED: 07-NOV-95

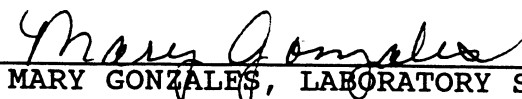
ANALYSIS PERFORMED BY: CITY OF OCEANSIDE
WATER UTILITIES DEPARTMENT LABORATORY

DATE REPORTED: DECEMBER 28, 1995

ANALYTE	METHOD	CONCENTRATION (mg/kg) DRY WEIGHT	POLLUTANT CONCENTRATION (MONTHLY AVE)	CEILING CONCENTRATION (DAILY MAX)
ARSENIC	7060	ND <14	41 mg/Kg	75 mg/Kg
CADMIUM	6010	5.60	39 mg/Kg	85 mg/Kg
CHROMIUM, TOTAL	6010	25.8	1200 mg/Kg	3000 mg/Kg
COPPER	6010	495	1500 mg/Kg	4300 mg/Kg
LEAD	6010	43.8	300 mg/Kg	840 mg/Kg
MERCURY	7471	2.26	17 mg/Kg	57 mg/Kg
MOLYBDENUM	6010	11.3		75 mg/Kg
NICKEL	6010	71.3	420 mg/Kg	420 mg/Kg
SELENIUM	7740	ND <21	36 mg/Kg	100 mg/Kg
ZINC	6010	937	2800 mg/Kg	7500 mg/Kg

METHOD: EPA SW846, TEST METHODS FOR EVALUATING SOLID WASTES,
THIRD EDITION.

APPROVED BY:


MARY GONZALES, LABORATORY SUPERVISOR



CITY OF OCEANSIDE

WATER UTILITIES DEPARTMENT LABORATORY

LABORATORY REPORT

SAMPLE: SLUDGE CAKE -- TOTAL SOLIDS = 17.1 %
IDENTIFICATION: LA SALINA WWTP
12 DISCRETE SAMPLES COMPOSITED IN LAB
SAMPLES RECEIVED: 04-DEC-95
ANALYSIS PERFORMED BY: CITY OF OCEANSIDE
WATER UTILITIES DEPARTMENT LABORATORY
DATE REPORTED: DECEMBER 28, 1995

ANALYTE	METHOD	CONCENTRATION (mg/kg) DRY WEIGHT	POLLUTANT CONCENTRATION (MONTHLY AVE)	CEILING CONCENTRATION (DAILY MAX)
ARSENIC	7060	ND <14	41 mg/Kg	75 mg/Kg
CADMIUM	6010	4.09	39 mg/Kg	85 mg/Kg
CHROMIUM, TOTAL	6010	21.5	1200 mg/Kg	3000 mg/Kg
COPPER	6010	475	1500 mg/Kg	4300 mg/Kg
LEAD	6010	40.4	300 mg/Kg	840 mg/Kg
MERCURY	7471	2.47	17 mg/Kg	57 mg/Kg
MOLYBDENUM	6010	ND <7.4		75 mg/Kg
NICKEL	6010	67.7	420 mg/Kg	420 mg/Kg
SELENIUM	7740	ND <19	36 mg/Kg	100 mg/Kg
ZINC	6010	899	2800 mg/Kg	7500 mg/Kg

METHOD: EPA SW846, TEST METHODS FOR EVALUATING SOLID WASTES,
THIRD EDITION.

APPROVED BY:

Mary Gonzales
MARY GONZALES, LABORATORY SUPERVISOR

TREATED SEWAGE SLUDGE MONITORING

TYPE OF MONITORING: BACTERIOLOGICAL
SAMPLING FREQUENCY: BIMONTHLY

DATE REPORTED: DECEMBER 28, 1995

REQUIREMENT FOR CLASS B ALTERNATIVE 1: DENSITY OF FECAL COLIFORM FROM SEVEN SAMPLES OF TREATED SEWAGE SLUDGE MUST NOT EXCEED 2 MILLION PER GRAM OF SEWAGE SLUDGE SOLIDS.

SAMPLE LOCATION	SAMPLE	# FECAL COLIFORM PER 100 ML	% TS	# FECAL COLIFORM /GM TS	LOG	SAMPLER	DATE	TIME	DIG. #
LA SALINA	1	8000	16.2	494	2.6936	SWOBODA	06-NOV-95	2100-2300	SECONDARY
	2	13000	16.7	778	2.8912	BERRY	14-NOV-95	1300-2100	SECONDARY
PRESS CAKE	3	13000	16.9	769	2.8861	TAYLOR	20-21-NOV-95	1900-0300	SECONDARY
	4	3000	16.4	183	2.2623	NASTASI	27-NOV-95	1600-2400	SECONDARY
	5	2200	17.1	129	2.1094	SWOBODA	03-04-DEC-95	1900-0300	SECONDARY
	6	1400	17.0	82	1.9157	SILLER	10-11-DEC-95	2000-0400	SECONDARY
	7	3000	16.8	179	2.2518	CARUTHERS	17-DEC-95	2000-2400	SECONDARY

LOG MEAN =

2.4300

GEOMETRIC MEAN =

ANTILOG 2.43 = 269.2

MEETS CLASS B ALTERNATIVE 1 STANDARDS: YES

COMMENTS: NONE

METHOD: FECAL COLIFORM - DIRECT TEST BY MOST PROBABLE NUMBER (MPN), STND. MTHDS, 18TH ED., 9221 E.2
%T.S. - STND. MTHDS., 17TH ED., 2540 B.

REPORT BY: M.L. PAPPAGIANIS

APPROVED BY

M. Gonzalez

XC: SAN LUIS REY WTP, LA SALINA WTP, WATER UTILITIES ADMIN/G. PENNELL

LA SALINA WASTEWATER TREATMENT PLANT - NOVEMBER 1995

REQUIREMENTS FOR VECTOR ATTRACTION REDUCTION - 503.33(b)(1) - OPTION 1
REDUCTION IN VOLATILE SOLIDS CONTENT - AT LEAST 38% REDUCTION REQUIRED

MONTH	RAW SLUDGE			DAF SLUDGE			DIGESTER		PRESS		VOL. SOLIDS
	%TS	%VS	FLOW	%TS	%VS	FLOW	FEED %VS	FEED %VS			REDUCTION %
1											REDUCTIONS
2	3.70	81.0	20000	2.10	84.8	13900	82.1	72.7			BASED ON
3											
4											
5											MONTHLY
6	3.70	79.0	20000	1.70	83.0	15300	80.0	62.0			
7	3.90	80.0	20000	1.50	86.0	14000	81.3	68.0			AVERAGES,
8											
9	3.88	80.0	20000	2.20	82.8	13200	80.8	66.7			SEE BELOW.
10											
11											
12											
13	3.40	77.0	20000	2.00	81.0	24100	78.7	67.0			
14	2.50	79.7	20000	1.70	82.0	4100	80.0	72.7			
15											
16	3.00	81.0	20000	1.40	89.0	14000	83.0	69.0			
17											
18											
19											
20	3.40	82.7	20000	2.00	83.0	18600	82.8	70.4			
21	4.50	80.0	20000				80.0	63.2			
22											
23											
24											
25											
26											
27	4.00	80.0	20000				80.0	68.0			
28	4.40	80.0	20000	2.50	81.0	24500	80.4	67.0			
29											
30	3.60	78.0	20000	3.50	82.0	11900	79.5	70.0			
31											
AVG.	3.67	79.9	20000	2.06	83.5	15360	81.0	68.1			49.1

NOTE: RAW SLUDGE FLOWS ARE ESTIMATES.

LA SALINA WASTEWATER TREATMENT PLANT - DECEMBER 1995

REQUIREMENTS FOR VECTOR ATTRACTION REDUCTION - 503.33(b)(1) - OPTION 1
REDUCTION IN VOLATILE SOLIDS CONTENT - AT LEAST 38% REDUCTION REQUIRED

MONTH	RAW %TS	SLUDGE %VS	FLOW	DAF %TS	SLUDGE %VS	FLOW	DIGESTER FEED %VS	PRESS FEED %VS	VOL. SOLIDS REDUCTION %
1									REDUCTIONS BASED ON MONTHLY AVERAGES, SEE BELOW.
2									
3									
4	0.88	73.0	15000	1.20	85.0	9000	78.4	69.0	
5	4.80	80.0	15000	2.50	89.0	7200	81.8	67.0	
6									
7	4.16	78.8	15000	3.88	83.9	12300	81.0	65.5	
8									
9									
10									
11	3.40	84.0	15000	1.90	94.0	12600	87.2	76.0	
12	4.60	80.0	15000				80.0	69.0	
13									
14	4.10	80.0	15000	3.60	84.0	14200	81.8	62.0	
15									
16									
17									
18	3.50	78.0	15000	1.60	81.0	13200	78.9	65.0	
19	3.96	81.0	15000	2.80	81.0	22100	81.0	43.0	
20	4.50	77.0	15000				77.0		
21	3.98	80.0	15000	3.28	80.5	20200	80.3	33.3	
22									
23									
24									
25									
26	5.00	78.0	15000	2.80	80.5	16100	78.9	82.0	
27									
28	1.40	71.0	15000	3.20	80.0	15900	77.4	50.0	
29									
30									
31									
AVG.	3.69	78.4	15000	2.68	83.9	14280	80.6	62.0	60.0
AVERAGE % VOLATILE SOLIDS REDUCTIONS FOR NOV. AND DEC. 1995									= 54.6

AVERAGE % VOLATILE SOLIDS REDUCTIONS FOR NOV. AND DEC. 1995 = 54.6

NOTE: RAW SLUDGE FLOWS ARE ESTIMATES.